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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/878,401	06/12/2001	Jae Yong Park	2658-0268P	2192

2292 7590 11/01/2004

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EXAMINER

NGUYEN, JENNIFER T

ART UNIT	PAPER NUMBER
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2674

DATE MAILED: 11/01/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/878,401

Applicant(s)

PARK, JAE YONG

Examiner

Jennifer T Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 12 June 2001.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

### DETAILED ACTION

1. This Office action is responsive to Amendment filed on 08/11/2004.
2. Applicant's request for reconsideration of the finality of the rejection of the last Office action is persuasive and, therefore, the finality of that action is withdrawn.

#### *Claim Rejections - 35 USC § 102*

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-10 are rejected under 35 U.S.C. 102(e) as being anticipated by Nitta (U.S. Patent No. 6,275,220).

Regarding claim 1, referring to Fig.2, Nitta teaches an electro-luminescence display comprising: an electro-luminescence panel having a display area (11) and a non-display area (i.e., the area having tape carrier packaged and driving circuit board disposed upon); driving circuit boards (22) for applying driving signals to a gate line and a data line provided on a surface of the electro-luminescence panel; and the tape carrier packages (20) connecting the driving circuit boards (22) and the electro-luminescence panel (11) in a planar state wherein the tape carrier packages (20) and the driving circuit boards (22) are disposed upon the non-display area within the panel (col. 2, lines 24-53).

Regarding claim 2, Nitta further teaches the driving circuit boards include: a gate driving circuit (22) for applying driving signals to the gate lines; and a data driving circuit (22) for applying driving signals to the data lines (Fig. 3).

Regarding claims 3-5, Nitta further teaches the driving circuit boards (22) include a plurality of output pads (22b) electrically connected to the tape carrier packages (20) and panel includes a plurality of input pads (22a) that are provided at the non-display area and electrically connected to the tape carrier packages (20) (col. 2, lines 24-53).

Regarding claim 6, Nitta further teaches a first group of tape carrier packages (20) arranged between the panel (11) and the gate driving circuit and a second group of tape carrier packages (20) arranged between the panel (11) and the data driving circuit (Figs. 2 and 3, col. 2, lines 8-53).

Regarding claim 7, Nitta further teaches the tape carrier packages (20) has a first side for connecting the driving circuit boards (22) to the panel (11) and a second side for holding a computer chip (IC 21) (col. 2, lines 24-53).

Regarding claims 8-10, Nitta teaches a substantial portion of each of said tape carrier packages (20) having a first portion disposed in a common plane with said driving circuit boards (22) and connected to the panel and a second portion disposed in a contiguous plane to the common plane of said panel and said first portion (col. 2, lines 24-53).

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

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having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. ~~Claims 1-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kawada et~~  
al. (Patent No. US 6,774,872).

Regarding claim 1, referring to Fig. 4C, Kawada teaches an electro-luminescence display comprising: an electro-luminescence panel having a display area (15) and a non-display area (11); driving circuit boards (23) for applying driving signals to a gate line and a data line provided on a surface of the electro-luminescence panel; and the tape carrier packages (21a') connecting the driving circuit boards (23) and the electro-luminescence panel (11) wherein the tape carrier packages (21a') and the driving circuit boards (23) are disposed upon the non-display area (11) within the panel (from col. 4, line 56 to col. 5, line 10).

Kawada differs from claim 1 in that he does not specifically teach the tape carrier packages connecting the driving circuit boards and the electro-luminescence panel in a planar state. Kawada teaches the tape carrier packages (21a') connecting the driving circuit boards (23) mounted upon heat sink block (26) of the electro-luminescence panel (11) (Fig. 4C). However, it would have been obvious to minimize the size of the heat sink block in order to provide a display that is capable of being made having a small thickness.

Regarding claims 2 and 6, Kawada teaches the driving circuit boards include: a gate driving circuit for applying driving signals to the gate lines; and a data driving circuit for applying driving signals to the data lines (inherently in a electro-luminescence panel, col. 1, lines 9-52).

Regarding claims 3-5, Kawada further teaches the driving circuit boards (23) include a plurality of output pads (21b') electrically connected to the tape carrier packages and panel

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includes a plurality of input pads (between PCB 23 and TAB 21a') that are provided at the non-display area and electrically connected to the tape carrier packages (Fig. 4C, from col. 4, line 56 to col. 5, line 10).

Regarding claim 7, Kawada further teaches the tape carrier packages (21a') has a first side for connecting the driving circuit boards (23) to the panel (11) and a second side for holding a computer chip (IC 21) (Fig. 4C, from col. 4, line 56 to col. 5, line 10).

Regarding claims 8-10, Kawada further teaches a substantial portion of each of said tape carrier packages (21a') having a first portion disposed in a common plane with said driving circuit boards (23) and connected to the panel (11) and a second portion disposed in a contiguous plane to the common plane of said panel and said first portion (from col. 4, line 56 to col. 5, line 10).

7. Applicant's arguments with respect to claims 1-10 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Jennifer T. Nguyen** whose telephone number is **703-305-3225**. The examiner can normally be reached on Mon-Fri from 9:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Richard A Hjerpe** can be reach at **703-305-4709**.

**Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks

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Washington, DC. 20231

**Or faxed to: 703-872-9306 (for Technology Center 2600 only)**

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Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive,  
Arlington, VA, sixth-floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding  
should be directed to the Technology Center 2600 Customer Service Office whose telephone  
number is 703-306-0377.

JNguyen  
10/26/04

  
REGINA LIANG  
PRIMARY EXAMINER